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# Determinants of well-being of middle-school students in Moroccan urban and rural areas: A comparative study

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## Abstract:

**CONTEXT:** Well-being in schools is often considered in relation to the educational and academic success of students. However, it is difficult, at present, not to consider the well-being of a student without an ecological and holistic perspective, in view of the interaction principles implemented in schools. This research aimed to identify the representations hold by Moroccan teenagers about well-being. It aimed, also, to do a comparison between two groups of teenagers: one belonging to urban and the other to rural areas.

**METHODS:** This quantitative study concerns a sample of 1444 pupils (755 girls and 689 boys) enrolled in middle school. Research instrument for this study was questionnaire that includes 15 questions relating to well-being at school, relationships with the teacher, relationships between students, violence experienced, and coeducation.

**RESULTS:** From the analysis of data, pupils in the rural areas seem to be most sensitive to the "emotional" aspects of the teacher-pupil relationship. The girls are more satisfied in middle school than boys. This fact seems to be a very important factor in their retention and in reducing their dropout rate. As expected, academic success is highlighted in the two groups of students as an indicator of well-being. However, the fact of not knowing which orientation to choose constitutes a factor of ill-being for pupils, especially for girls. The results show also that well-being is not taken care of in the two environments (urban and rural). This will explain the results of Moroccan students assessed by the Program for the Monitoring of Student Achievement.

**CONCLUSIONS:** Training programs should focus on the development of teachers communication skills, ability to manage behavioral problems of their students and use teaching approaches to develop positive relationships between students.

## Keywords:

Middle school, representations, rural world, urban world, well-being

## Introduction

The World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."<sup>[1]</sup> The WHO definition links health explicitly with well-being and conceptualizes health as human right requiring physical and social resources

to achieve and maintain it. "Well-being" refers to a positive rather than neutral state, framing health as a positive aspiration.<sup>[1]</sup>

The state of health of students is therefore a major component of their well-being. Thus, the study of well-being in our research is a health issue, which, as the WHO points out, is more than a sick/nonsick dichotomy. The connection of the notion of well-being to that of health questions us. Despite the

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obvious and recognized connections, there is currently no definition of “well-being” that makes consensus in the field of health promotion. Nevertheless, several elements stand out, such as the subjective, psychological, and social dimensions and economic and emotional ones that constitute the well-being of individuals and populations. Well-being at school is manifested by a positive emotional life that is the result of the harmony between some of specific environmental factors, on the one hand, and between the personal needs of these students and their expectations of school, on the other hand.<sup>[2-4]</sup> This well-being, understood as the subjective appreciation of the students’ experience at school, certainly presents not only major challenges in terms of public health but also education success. It is thus correlated to higher academic self-esteem and better academic results.<sup>[5]</sup> Several authors show that the individual characteristics of the students, such as their well-being, perception of the school environment, motivation, involvement in school activities, gender, and work, have important effects on school performance. For example, Konu and Rimpelä define well-being in school as a four-dimensional phenomenon: school conditions, social relationships, means of personal development, and health status.<sup>[6]</sup> For others, it depends on many factors, including student’s opinions on school rules and their relationships with teachers and classmates.<sup>[7]</sup> Student well-being can also affect other characteristics, such as achievement, motivation, or attitude toward learning.<sup>[7]</sup> Moreover, some authors show that this phenomenon has a significant impact on the student’s behavior and their results.<sup>[8]</sup>

Research on well-being in school has emerged in the actual context marked by a reorientation of school aims. Today, educational goals are no longer just about developing of children knowledge. They also relate to the development of the personality of children at school so that they integrate better into society and that they develop the necessary social skills that allow them to live their lives to the full.<sup>[9,10]</sup> Researchers agree on several points: On the one hand, students are the most able to assess their well-being; on the other hand, well-being at school is an important dimension of their life quality; finally, well-being is part of the cognitive and affective evaluation of the overall satisfaction of experiences at school.<sup>[11]</sup> International studies on this topic indicate that several categories of factors (individual, social, emotional, etc.) can influence student satisfaction in school.<sup>[12-15]</sup>

Furthermore, although they are necessary to improve the personal development and academic success of students, actions that intended to promote well-being at school and that have been subject to rigorous scientific evaluation are rare or difficult to identify given the variability in definitions of well-being.<sup>[16,17]</sup>

In this perspective, our study aims to compare the perceptions of students in urban schools and students in rural schools about their well-being in middle school. This comparison between the urban and rural areas seems interesting because the rural one could constitute favorable society for education in terms of socialization. Indeed, there, relationships are more stable, staff numbers in class are reduced, and there are fewer cases of violence and discipline problems than in cities.

## Methods

Our survey focuses on the well-being of Moroccan middle-school students.

The study is descriptive in its nature which involves comparative survey. It is descriptive since it attempts to assess the level of psychological well-being among male and female middle-school students. Quantitative approaches of data collection were used.

### Participants

This study concerns a sample of 1444 pupils (755 girls and 689 boys) enrolled in middle school. They are on an average of 14 years old and enrolled in the 1<sup>st</sup> year to the third. 746 students (51.66%) belong to public establishments in the rural world, while 698 students (48.34%) to public establishments in the urban world.

The choice of the middle-school population is that international surveys show that the well-being indicators studied deteriorate sharply between 11 and 15 years.

### Questionnaire

Research instruments for this study were questionnaire. It was developed through a literature review and on the results of semi-structured interviews of some middle-school teachers. It includes 15 questions relating to well-being at school, relationships with the teacher, relationships between students, violence experienced, and coeducation.

### Tool validity

To ensure its validity, the research tool was analyzed by a group of experts in health education. The necessary corrections have been made in the light of the comments of these experts

### Tool fidelity

To ensure the fidelity of the study tool, it was applied twice with a time difference of 2 weeks on a survey sample made up of 100 male and female middle-school students from outside the study sample. The number of questions is 20. The Cronbach alpha coefficient is 0.82.

### *Ethical approval and data collection*

The authorization to survey students had been previously obtained from the institutions concerned. The survey was introduced by explaining the purpose and goals of the study. Participants were asked to participate and were informed of the guarantee of the anonymity. Participants who give their consent are invited to complete the questionnaire. The survey was administered on paper.

### **Data analysis**

Collected data were analyzed with descriptive analysis using SPSS 17.0.0 for Windows, 2007, SPSS Inc., Chicago, USA. It allows comparisons between groups of students.

## **Results**

### **General dimension of well-being**

The first question is general. It seeks to know what is the most important well-being dimension for students in the urban world and students in the rural world. All the dimensions are considered: All the well-being dimensions are cited by students mainly the physical dimension (material, organizational and environmental ones), the relational, the psychological and the educational one. Each dimension is taken either in its original title as "material conditions," "educational support," "teacher and class relation," or with the element most common to the two populations as "the organization of school rhythms" in reference to the distribution of rest and work times during the day and throughout the year and "the state of mind when one goes to school" with reference to the student's mood state when he/she arrives at middle school.

For both groups of students, the most important point promoting well-being in school is one which is linked to relationships with peers and teachers. The percentage for rural students is proportionally higher (45.4% vs. 40.8%). The difference is not significant ( $P < 0.05$ ).

However, this dimension is significantly more important for girls than for boys in both urban and rural populations ( $P = 0.009$ ).

The other two items with different percentages between rural and urban students are the material well-being and the state of mind. The first is more important for rural students ( $P = 0.00018$ ). The second is more important for urban students ( $P = 0.04$ ).

Taking gender into account, comparing the two populations shows that the boys seem to more significantly identify material state as a factor of well-being compared to girls: 21.5% against 16.7% (urban) and 20.3% against 12.5% (rural). The difference is not significant ( $P = 0.3$ ) for the first and is significant for the second ( $P = 0.0008$ ).

### **Psychological well-being**

#### *Elements decreasing well-being of students*

First, the responses indicate that 214 students from urban areas and 180 from rural areas did not choose any of the proposals. "Not knowing which orientation to choose" is the proposition most chosen by students from both populations.

Urban students choose "lack of morning fun" first as a factor that decreases their well-being in middle school, while rural students choose first "moral discomfort." On the other hand, "the desire to learn" is the proposal least chosen by the urban population.

We note that the choices of other proposals are completely identical between the two populations.

### **Influence of the respondents' gender**

For urban students, the responses indicate that there are significant differences between the percentages of girls and boys for two propositions:

- Boys do not enjoy coming in the morning to school (31.6%) than girls (21.2%) ( $P = 0.007$ )
- Girls do not know which orientation they will choose (42.9%) than boys (25%).

The percentages of the other proposals do not show a significant difference between girls and boys.

For rural students, the responses indicate that there are significant differences between the percentages of girls and boys for four propositions:

- The boys do not know why they come to school (13.2%) against (5.7%) girls
- They do not want to learn (13.5) than girls (5.2%)
- They do not see the value of learning the subjects taught in school (11.7%) than girls (6.6%)
- They have no pleasure coming in the morning to school (26.6%) than girls (12.2%) ( $P = 0.007$ ).

The percentages of the other propositions do not show a significant difference between girls and boys.

### **Elements that increase well-being in school**

The responses indicate that many students in both populations had good academic success in their well-being (49.3% in urban areas and 41.4% in rural areas).

The wanting to learn new knowledge is a second choice for 33% of rural students and 27.5% of urban students (there is no significant difference).

### **Taking into account well-being in the school for both populations**

The responses indicate that just over one-third of the students in the rural and urban areas (37.5% and

33.2%, respectively) think that well-being is taken into account.

Nearly 50% of urban students and 46.1% of rural respondents believe that it is not taken.

### Comparison of the two populations by gender

Whatever the gender of the respondents, the rural population thinks more than the urban population that well-being is taken into account in school. The difference is less important for females than for males. Overall, it is boys in the urban population who feel the least amount of support for their well-being in school than boys in the rural population. No difference was noted regarding the female gender.

### Violence and well-being in school

The responses indicate that the insults are the proposal chosen as a form of violence by both populations (30.6% and 31.4%). The difference is not significant ( $P = 0.2$ ).

“The domination of the largest on the smallest” is the proposal chosen mainly by the students of the urban (32.7%) compared to the students of the rural (19.8%). The difference is statistically significant ( $P = 0.000008$ ).

The judgment of others decreases the well-being of rural students more than those of the urban area (28.5% and 15.2%, respectively,  $P = 0.0002$ ).

### The well-being and the coeducation in school

The responses indicate that the coeducation at school is considered essential for the well-being of students by the two populations and even more so by rural students (60.5% vs. 48.1%). The difference is significant ( $P = 0.000047$ ).

Otherwise, the co-education at school is more important for boys (63.8%) than for girls (44.2%). the difference is statistically significant ( $P = 0.00008$ ).

### Comparison of the two populations by gender

For students from both populations, the coeducation is important for rural boys (65%) more than for urban ones (62.6%). No difference between girls from both populations (44.3% and 44.1%) was noted. The boys prefer mixed classes.

We asked a question that allowed us to consider the elements not mentioned in the questionnaire that, according to the students, can increase their well-being in school. It is an open question. The results show that the essential points for the well-being of urban students are the day school rhythms in the year ones, the relationship with their peers, the security inside

and outside school, the educational outings, and the extracurricular activities.

For rural students, the elements relate to school transportation and the construction of boarding schools.

## Discussion

The aim of this study is to compare the perceptions of the urban students to those of rural students about the well-being of the student in school. The main hypothesis was that these perceptions are different. The results provide some useful information about the well-being perceived by students. The student perceptions of the two groups concerning student well-being in school meet on certain indicators but differ on others.

The results of our study show that the urban and rural students agree that good relationships with teachers and peers are important for their well-being. However, this dimension is significantly greater for girls than for boys in both the urban and rural populations.

The quality of the relationships between students and teachers can influence students' commitment toward school and their socioemotional development.<sup>[18-22]</sup> Teachers and other school staff can promote the social and emotional development of students by creating a caring and respectful learning environment.<sup>[23,22]</sup> Positive relationships with teachers are particularly important for disadvantaged students social and emotional well-being.<sup>[24]</sup>

The findings in this study show also that the general well-being is linked to material conditions of the school. The influence of material conditions is significant for pupils in rural areas. A comparison of the two populations, taking into account gender, shows that boys, more than girls, seem to identify material state as a factor of well-being. In rural areas, the difference is significant between boys and girls. These seem to give less importance to the material conditions of the establishment.

General well-being is linked at last to the state of mind according to urban middle-school students more than those of rural ones. The difference is statistically significant. A good state of mind would likely affect skills acquisition and student's learning success.

Well-being is the state of mind that students experience when their cognitive, emotional, social, and physical needs are met.

Educational institutions are becoming increasingly concerned about school violence. It is important to be aware that the majority of students have some experience

with school violence. There is considerable evidence that students' exposure to violence is associated with both antisocial behavior and psychological trauma (e.g., depression, anxiety, anger, and posttraumatic stress disorder). Otherwise, the feeling of well-being at school is very significantly correlated to the fact of not having been the victim or witness of violence between pupils. In our study, we looked for the types of violence that affect the students' well-being in our sample. The results have shown that insults, the domination of the largest over the smallest, and the judgment of others constitute the dominant types of violence encountered in both the urban and rural schools. However, if no significant difference appeared for the insults, the dominance exercised by the older ones has more negative impact on the urban students.

The judgment of others according to rural middle-school students has a negative impact on their well-being. This could constitute a brake which prevents them from advancing and progressing. The rural middle-school students feel paralyzed and haunted by the fear of being judged.

Otherwise, a form of verbal abuse has a negative effect on the well-being of students in the two groups in our sample. They can be experienced as cause of the exclusion of others.

Mixed schooling seems essential for the well-being of the students in our sample. It is even more important for the pupils of rural high school. It is difficult to pinpoint the reasons for this difference. The responses also showed that boys put more emphasis than girls on the contributions of the mixed school to their well-being. It seems that they retain advantages on the intellectual level (exchange of ideas, wider field of interests,...) and on the character and social level, in particular, by a richer and more coherent group life.

However, girls seem to be more aware of the problems posed by coeducation in middle school and therefore ignore the benefits of this on their well-being.

From a psychological point of view, students in our sample report a decrease in their well-being due to moral discomfort, a lack of pleasure in coming to middle school, and a concern about their future. A good academic success otherwise increases their well-being.

Psychological well-being takes into account the personal factors of the pupil in relation to his/her self-esteem (in relation to his body) and his/her good integration into the school system and his/her class (confidence in his/her future, desire to "learn, feeling safe, and orientation not undergone).

Furthermore, investigations reveal that psychological well-being has positive and significant effectiveness on students' academic performance.<sup>[24]</sup> From a psychological point of view, students report a decrease in their well-being due to moral discomfort, a lack of pleasure in coming to school, and a concern about their future. A good academic success otherwise increases their well-being.

By considering the sex of the respondents, we noted significant differences between urban boys and girls. Boys did not enjoy coming to school more than girls. These do not know which orientation to choose than boys. We note a clear abrasion of the feeling of well-being between boys and girls in rural areas. Some boys do not know why they are coming to school, do not want to learn, do not enjoy coming to school, and do not see the point of learning subjects taught in school.

The results, in connection with the consideration of well-being in middle school, show that a majority of urban students and around half of rural students feel that well-being is not taken into account.

Overall, urban boys feel less responsible for their well-being in middle school than rural ones.

This research reveals that the rural students believes more than the urban ones that well-being is taken into account at school (regardless of the gender of the respondents). The primary points for the well-being of these students are school transport and the construction of boarding schools.

The main points for the well-being of urban students are the school rhythms during the day and throughout the year, the relationship they have with their peers in school, the educational outings, the extracurricular activities, the safety inside and outside school, and the existence of infirmaries, listening centers, and libraries in school.

## Conclusions

Well-being is inscribed, in the education area, in a story concerning the role historically attributed to the school. In general, if the function of the school was only education and learning; at present, it cannot be reduced to that. We must now take into account the overall well-being of students so that they can integrate into society and contribute to it.

This study was conducted to identify the perceptions of middle-school students on their well-being. The pupils belonged to two types of establishments: rural and urban middle school.

Relational well-being is important for rural students and urban students. It is even more important for the firsts. The crossing with the variable sex varies this result. Pupils in rural areas seem to be most sensitive to the “emotional” aspects of the teacher–pupil relationship. The girls are more satisfied in middle school than boys. This fact seems to be a very important factor in their retention and in reducing their dropout rate.

We found that in rural areas, the dropout rate affects girls more than boys in primary school. This will explain the difficult transition of rural girls between primary and high school. For rural boys, dropout occurs mostly in high school. They are more concerned with abandonment than girls. Otherwise, relationships with peers and teachers seem to be essential components for retention or dropping out.

As expected, academic success is highlighted in the two groups of students as an indicator of well-being. However, the fact of not knowing which orientation to choose constitutes a factor of ill-being for pupils, especially for girls.

Violence increases the feeling of insecurity within the school and can have a negative impact on the pupil’s feeling of well-being. Thus, it emerges from our study that insults represent the type of violence that negatively impacts the well-being of students in the two environments studied. In addition, students from schools located in rural areas are negatively influenced by the judgment of others. This form of violence can undermine moral integrity, human dignity, and self-esteem and cause profound identity distress, depressive states, and dropping out of school. Experience shows that a simple open debate on this subject, during the hour of class life, is very often enough to permanently eradicate this type of mischief which harms the classroom climate and introduces harmful cleavages for the well-being of students and teachers.

Although officially students are somehow asexual “learners” (and that diversity has never been the subject in our country of a specific pedagogical reflection), the daily life of the classes is the theater interactions between teachers and pupils and between students profoundly marked by the social representations of the masculine and the feminine.

Our study also shows that coeducation is considered to be essential for well-being, more for rural students. The feeling of well-being is affirmed for boys more than girls in mixed classes. The hypothesis that coeducation is a factor of well-being, especially for boys, has been confirmed.

The results show that well-being is not taken care of in the two environments (urban and rural). This will explain the results of Moroccan students assessed by Program for the Monitoring of Student Achievement (PISA). According to the PISA results, good academic performance is associated with social equity and student well-being. The 2019 results show that Moroccan students are ranked among the last. Hence, we should include in student assessment protocols a measure of their satisfaction or well-being at school.

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### Conflicts of interest

There are no conflicts of interest.

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